CLAIMS

What is claimed is:

1. A coupling arrangement for coupling a motor to a hoist machine, the motor having a shaft extending in a direction normal to the motor face, the coupling arrangement comprising:

a first drum flange comprising an outer body having a first end and a second end, an inner wall surface defining a cavity of substantially circular cross section, the cavity having a given diameter along a first length of the body, and of reducing diameter along a second length of the body, the flange adapted to receive at said first end a tapered bushing of increasing diameter and dimensioned such that, upon insertion of the bushing within the body a given length, the bushing frictionally engages with the inner wall surface of reducing diameter for retention therein; the bushing having a central cavity for receiving the shaft of the motor and means for securing onto the shaft; and

wherein the first end of the drum mount flange is coupled directly to a portion of a brake drum within an interior portion of the hoist machine, and wherein the motor face is coupled to an outer portion of the hoist machine.

2. The coupling arrangement of claim 1, wherein the hoist machine is an elevator hoist machine.

3. The coupling arrangement of claim 1, wherein the means for securing comprises set screws for engaging corresponding threaded bores in said body and slots in said bushing.

4. The coupling arrangement of claim 1, wherein the first end of said drum mount flange body includes threaded holes alignable with corresponding holes in said brake drum for receiving a securing rod for connecting said drum mount flange to said hoist machine.

5. The coupling arrangement according to claim 1, wherein the motor is a single bearing motor.

6. A method for coupling a motor onto a hoist machine, comprising:

providing a drum mount flange member having an outer body with a first end and a second end, an inner wall surface defining a cavity of substantially circular cross section, the cavity having a given diameter along a first length of the body, and of reducing diameter along a second length of the body;

inserting into said first end a tapered bushing of increasing diameter a distance sufficient to cause the bushing to frictionally engage with the inner wall surface of reducing diameter so as to be retained therein;

securing the bushing to a shaft of the motor; and

securing the first end of the drum mount flange to the hoist machine.